

Critical Thinking Activity Pack

In today's global and rapidly changing world, children need to be able to do much more than repeat a list of facts; they need to be critical thinkers who can make sense of information, analyze, compare, contrast, make inferences, and generate higher order thinking skills.

There is no one strategy to support and teach your child how to think critically. As a parent, your role may sometimes be to ask open-ended questions to guide the thinking process. In other cases, it may be more appropriate to allow your child to experiment and refine their theories on what causes things to happen.

- Provide opportunities for play. Testing how things work informally is crucial to developing critical thinking skills. It is during play that children explore cause and effect. What happens if I drop a spoon over and over again off the side of a high chair tray or roll two marbles down a chute at the same time? How can I get the block to balance on the top of this tower? By providing indoor and outdoor space for playing, along with time for pretend play, you provide open-ended opportunities for your child to try something and see the reaction; and then try something else and see if they can create a different reaction. These hands-on experiences provide an integral foundation for later abstract critical thinking.
- Pause and wait. Offering your child ample time to think, attempt a task or generate a response is critical, but not necessarily easy to do. Try counting (silently) to 60 while your child is thinking, before intervening or speaking. This gives your child a chance to reflect on their response and perhaps refine their thoughts.
- Don't intervene immediately. Instead, try counting to 120, or even longer, and observe what your child is doing before stepping in. As challenging as it may be, try to avoid completing or doing the task for your child. For younger children, patiently re-adjusting and maneuvering to grasp a toy on their own encourages continued problem solving and develops executive functioning skills. For older children, ask critical thinking questions and provide enough information so they don't get frustrated, but not so much that you solve the problem for them.
- Ask open-ended questions. Rather than automatically giving answers to the questions your child raises, help them think critically by asking questions in return: "What ideas do you have? What do you think is happening here?" Respect their responses whether you view them as correct or not. You could say, "That is interesting. Tell me why you think that." Use phrases like "I am interested to hear your thinking about this." "How would you solve this problem?" "Where do you think we might find more information to solve this problem?"
- Help children develop hypotheses. Taking a moment to form hypotheses during play is a critical thinking exercise. Try asking your child, "If we do this, what do you think will happen?" or "Let's predict what we think will happen next."
- Encourage thinking in new and different ways. By allowing children to think differently, you're helping them hone their creative problem solving skills. Ask questions like, "What other ideas could we try?" or encourage your child to generate options by saying, "Let's think of all the possible solutions."

Of course, there are situations where you as a parent need to step in. At these times, it is helpful to model your own critical thinking. As you work through a decision making process, verbalize what is

happening inside your mind. Children learn from observing how you think. Taking time to allow your child to navigate problems is integral to developing your child's critical thinking skills and provides an opportunity to extend and experiment with their favourite activities.

Click the titles below to follow the circle time links

Hello Song

Elephant Toothpaste - Science Experiment

Whose House Is This - Story

Oil and Water Experiment

Introduce the topic with a paper towel circuit!

Materials needed: Paper towel and/or toilet paper rolls, ping pong ball, tape, bowl or container.

Activity instructions:

- 1. Cut your paper towel or toilet paper rolls in half vertically.
- 2. Tape to the wall, tilting the roll halves back and forth.
- 3. Invite your child to roll their ball, car, pom pom through the course and let it drop into the container at the bottom.
- 4. Try exploring and experimenting different angles and route options.



Questions and conversation during this activity:

- "What do you think will happen?"
- "How long will it take for the ball/car/pom pom to reach the bucket? Let's count together as we watch it roll!"
- "What will happen if we move one of the rolls? Let's try it!"

Keep in mind your child's skill level and make sure to set them up for success while challenging their abilities.

Older children can make their own or try making a marble run (see second photo) to plan, build, make predictions and explore the results.

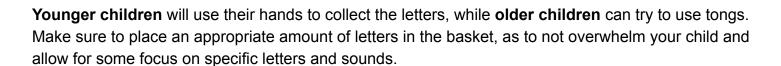


Letter Hunt Basket (Literacy)

Materials needed: Laundry basket or cardboard box, string, letters (use puzzle pieces, magnet letters or cut some from cardboard), tongs, paper and markers.

Activity instructions:

- Use your markers to print your child's name on a piece of paper.
- 2. Place the letters into the basket.
- 3. Place your string through the holes in your laundry basket (or make your own holes if you are using a box). See the photo for an example.
- 4. Invite your child to retrieve the letters from their name from the basket and match them to the letters on their paper.



"What's In The Bag?" Guessing Game (Language):

Materials needed: Familiar objects or toys, bag.

Activity instructions:

- Place a couple of familiar objects or toys inside of a bag.
- 2. Let your child reach their hand inside and (without peeking!) try to guess what it is.

Make sure you use items that are pretty easily distinguishable for them (a bear with a soft texture they know well, or a small ball, etc.). This is such an easy game that requires them to use their critical thinking and problem solving skills!

If you don't have a bag, just cut two holes on the sides of a cardboard box. Cover the box with an old t-shirt, lining up the sleeves with the holes in the box. Turn it sideways and invite your child to sit at the end of the box and reach their hands around the sides to feel what is inside. This option works well for larger items like food and stuffed animals.





Teach your child how to problem solve with my 1-2-3 method:

- 1. What do you KNOW?
- 2. What can you TRY?
- 3. Who can HELP?

Cotton Swah Forms (Math)

Materials needed: Cotton swabs, markers, paper.

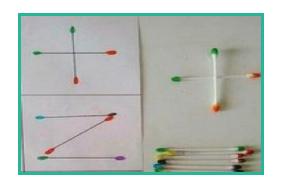
Activity instructions:

 Use your marker to draw different formations and symbols on the paper. The formations should consist of lines with dots at either end and be a similar size to the cotton swab it is representing.



2. Invite your child to use the cotton swabs to build and copy the forms and symbols on the paper.

For older children, add an extra element by adding colour to the drawing and swabs. This will help to enhance many different mathematical and coding skills. See the photo for an example.



Sorting Socks (Math)

Materials needed: Socks

Activity instructions:

1. Invite your child to help you by pairing the socks from the laundry.

This game will help your child learn to sort colours and patterns, match pairs, identify details within similar-looking socks, build new vocabulary (same, different), and begin to recognize how two objects can come together to make a complete set or pair.



Make Your Own Puzzle (Fine Motor)

Materials needed: A picture/photo/your child's name on cardstock or thin cardboard, scissors.

Activity instructions:

- 1. Invite your child to use their scissors to cut up their picture into 3 or more pieces.
- 2. Once you have cut it apart, you have made your very own puzzle.

Younger children may need you to do most of the cutting.

If you don't have any cardstock, try gluing your picture to a row of popsicle sticks. Use a sharp knife to cut the photo between each stick and invite your child to order them again to build the picture.





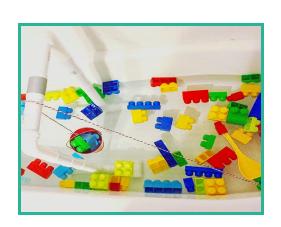


Water Block Pulley Station (Sensory)

Materials needed: Mega Bloks (or other bath toys), string or rope, bucket with handle, (PVC pipe is optional).

Activity instructions:

 Tie one end of your rope to the bucket handle and loop the rope over the shower curtain rod. If you're feeling super ambitious, use PVC pipe to make a 90 degree



- angled rectangle to pull over rather than using your shower rod.
- 2. Model how the pulley works by pulling on the loose end to lift the bucket.
- 3. Fill your bucket with blocks or other bath toys and pull it up into the air. "How many can you fit in the bucket?" "What would happen if you added water to the bucket?"

Water Bag Magic (Science)

Materials needed: Ziplock bag, water, sharpened pencils or pencil crayons.

Activity instructions:

- 1. Sharpen your pencils.
- 2. Fill your ziplock bag with water. Add food colouring to the water for an added dimension. Make sure to seal your bag at the top.
- 3. You may have to hold the bag if you don't have a good chip clip and spot to hang it.
- 4. Invite your child to imagine what might happen if you were to poke the bag of water with a pencil.
- 5. Make predictions before stabbing the pencils through the bag to explore the results.

It is a fairly clean activity, but you may have a few drips from the bag.



Clothespin Sort & Match (Fine Motor)

Materials needed: Paper, marker, clothespins, tape or glue, cardboard (the back of a cereal box works well).

Activity instructions:

- 1. Make 2 sets of patterns on small squares of paper.
- 2. Tape one set to the cardboard and the other set to the clothespins.
- 3. Invite your child to sort and match the patterns as they clip the clothespins onto the corresponding patterns.



If you don't have clothespins, you can use your pattern squares to play a simple matching or memory game with your child.

Painting With Kitchen Utensils (Creative):

Materials needed: Paper or cardboard, paint or fruit puree, kitchen utensils, cloth for cleanup, smock or painting shirt.

Activity instructions:

 Lay your paper on a flat surface and invite your child to prepare for painting by putting on their smock or paint shirt.



- 2. Use the kitchen utensils to dab in the paint and stamp on the paper.
- 3. Explore the different marks the utensils make, paying close attention to curves and lines. "What happens when you mix the colours?"

Most children will end up with a covered paper at the end. Remember process over product is key in creative activities.

Older children can start to make a picture using the tools to create texture. For example, you might use a fork to make blades of grass, or a round potato masher to make the sun. The possibilities are endless!

Log Stack (Building):

Materials needed: Pieces of wood (short branches, slices and small logs with flat ends).

*If you are cutting the wood yourself, make sure to sand the edges to prevent splinters. These wood pieces can also be purchased from the dollar store or other educational supply stores.

Activity instructions:

- Invite your child to stack and build using the logs and wood pieces.
- 2. Ask your child questions to help them solve problems and build their structure higher and higher. "How do they work together?" "What will happen if you add another?" "Will it balance if you turn it sideways?"



'Good Idea or Bad Idea' Game (Dramatic Play):

Children love to play make-believe, and it can also be a great opportunity for developing critical thinking skills. Get two of your child's favourite dolls or stuffed animals and make up a little story about them.

Create a scenario in which the characters have to make a decision and ask your child if they think that it's a "good idea" or a "bad idea." Ask your child to predict what might happen if the character chooses the bad idea. Then play out what happens if the character chooses the good idea.

Through play, your child will be learning how to think through their own actions and predict what the outcomes might be if they make a good or bad decision.





Chasing Bubbles (Movement)

Materials needed: Bubbles and bubble wand.

Activity instructions:

- 1. Invite your child to chase the bubbles and try to catch as many as they can. Your child will jump, leap, stretch, crouch and run to make sure they catch them all.
- 2. After they have caught some of the bubbles, offer an opportunity to practice blowing bubbles and enhance mouth muscles for speech and language development.



Car Maze (Movement)

Materials needed: Chalk, toy cars or trucks.

Activity instructions:

- 1. Use your chalk to make a maze outdoors.
- 2. Invite your child to drive their car through the maze, trying not to drive over any of the lines.
- 3. Help your child problem solve to find the best route.



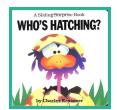
If you are playing indoors, try using masking tape instead of chalk to make your maze.

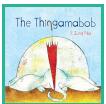
Book Recommendations: (click the titles below to follow the Amazon links)

Who's Hatching by Charles Reasoner

The Thingamabob by II Sung Na

The Girl Who Thought in Pictures by Julia Finley
Mosca







We hope you have enjoyed these activities!

Please let us know if you have any comments or suggestions and feel free to share your photos and stories about these activities!

Activity Pack created and produced by Mary Wolff

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